the events **4101** matching the current filters, and concatenate the video for all of these events into a single highlight video. In one or more embodiments the highlight reel may be automatically edited to show only the periods of time with the most important actions. In one or more embodiments the highlight reel may contain overlays showing the tags, metrics, or trajectories associated with the event. One or more embodiments may provide options for the generation or editing of the highlight reel; for example, users may have the option to order the events in the highlight reel chronologically, or by other tags or metrics. The highlight reel may be stored in event database **172**, and may be published to social media sites **4005**.

[0364] FIG. **42** illustrates an embodiment that analyzes social media postings to augment tags for an event. Data from sensors such as inertial sensor **111**, other sensor **4011**, and video camera **103** is analyzed **4201** by the event analysis and tagging system **4050**, resulting in initial event tags **4003***a*. In this illustrative example, the sensors **111**, **4011**, and **103** are able to detect that the player hit the ball, but are not able to determine the result of the hit. Therefore, event tags **4003***a* do not contain a "Swing Result" tag since the sensor data is insufficient to create this tag. (This example is illustrative; in one or more embodiments sensor data may be sufficient to determine a swing result or any other information.) The event analysis and tagging system **4050** accesses social media sites **4005** and analyzes postings **4203** related to the event. For example, the system may use the time and location of the event to filter social media postings from users near that location who posted near the time of the event. In this example, the system searches text postings for specific keywords **4204** to determine the result of the event. Although the sensors or video may be utilized to indicate that a hit has occurred, social media may be analyzed to determine what type of hit, i.e., event has actually occurred. For example, based on this text analysis **4202**, the system determines that the result **4205** is a likely home run; therefore it adds tag **4206** to the event tags with this result. The augmented event tags **4003***b* may then be stored in the event database and published to social media sites. The keyword search shown in FIG. **42** is illustrative; one or more embodiments may use any method to analyze text or other media to determine, confirm, or modify event tags. For example, without limitation, one or more embodiments may use natural language processing, pattern matching, Bayesian networks, machine learning, neural networks, or topic models to analyze text or any other information. Embodiments of the system yield increased accuracy for event detection not possible or difficult to determine based on sensor or video data in general. Events may be published onto a social media site or saved in a database for later analysis, along with any event tags for example.

[0365] One or more embodiments may save or transfer or otherwise publish only a portion of a video capture, and discard the remaining frames. FIG. **43** illustrates an embodiment with video camera **103** that captures video frames **4301**. The video contains frames **4310***a*, **4310***b*, and **4310***c* related to an event of interest, which in this example is a hit performed by batter **4351**. The bat is equipped with an inertial sensor **111**, and there may be an additional sensor **4011** that may measure for example temperature, humidity, wind, elevation, light, sound, or heart rate. Data from sensors **111** and **4011** is analyzed by event analysis and tagging system **4050** to determine the time interval of interest for the hit event. This analysis indicates that only the video frames **4310***a*, **4310***b*, and **4310***c* are of interest, and that other frames such as frame **4311** should be discarded **4302**. The system generates event tags **4003** and saves the tags and the selected video frames **4303** in event database **172**. This information, including the selected video frames, may be published for example to social media sites **4005**, e.g., without transferring the non-event data. The discard operation **4302** may for example erase the discarded frames from memory, or may command camera **103** to erase these frames. One or more embodiments may use any information to determine what portion of a video capture to keep and what portion to discard, including information from other sensors and information from social media sites or other servers.

[0366] It will be apparent to those skilled in the art that numerous modifications and variations of the described examples and embodiments are possible in light of the above teaching. The disclosed examples and embodiments are presented for purposes of illustration only. Other alternate embodiments may include some or all of the features disclosed herein. Therefore, it is the intent to cover all such modifications and alternate embodiments as may come within the true scope of this invention.

What is claimed is:

1. A multi-sensor event correlation system comprising:

at least one motion capture element configured to couple with a user or piece of equipment or mobile device coupled with the user, wherein said at least one motion capture element comprises

a sensor data memory;

a sensor configured to capture one or more values associated with an orientation, position, velocity, acceleration, angular velocity, and angular acceleration of said at least one motion capture element;

a first communication interface configured to receive communications, or one or more other values associated with an environmental sensor, a physiological sensor or both said environmental sensor and said physiological sensor or said communications and said one or more other values

or

at least one other sensor configured to locally capture said one or more other values associated with said environmental sensor, said physiological sensor or both said environmental sensor and said physiological sensor

or both said first communication interface and said at least one other sensor; and,

a microprocessor coupled with said sensor data memory, said sensor and said first communication interface, wherein said microprocessor is configured to

collect data that comprises sensor values that include said one or more values from said sensor;

store said data in said sensor data memory

or

analyze said data and recognize an event within said data to determine event data

or

store said data in said sensor data memory and analyze said data and recognize said event within said data to determine said event data; and,